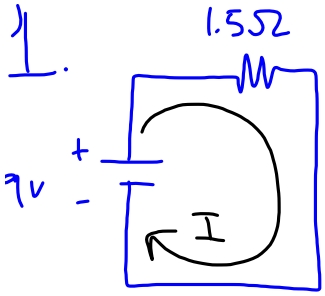
DRAW!

Battery

Resistor

Light Bulb

1.



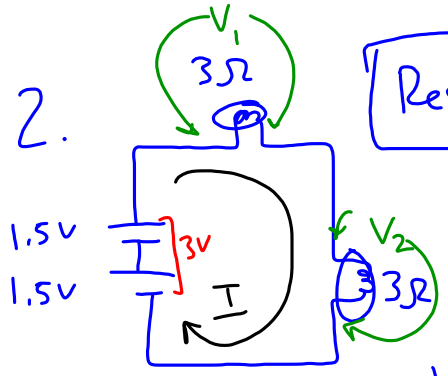
Current in Circuit:

$V = IR$

$I = \frac{V}{R}$

$= \frac{9V}{1.5\Omega} = 6A$

2.



Resistors in series ADD

$R_{total} = 6\Omega$

$V_{total} = 3V$

Batteries in series ADD

$V_{total} = IR_{total}$

$I = \frac{V_{total}}{R_{total}}$

$= \frac{3V}{6\Omega} = 0.5A$

1st Light Bulb:

$V_1 = IR_1$

$= (0.5A)(3\Omega)$

$= 1.5V$

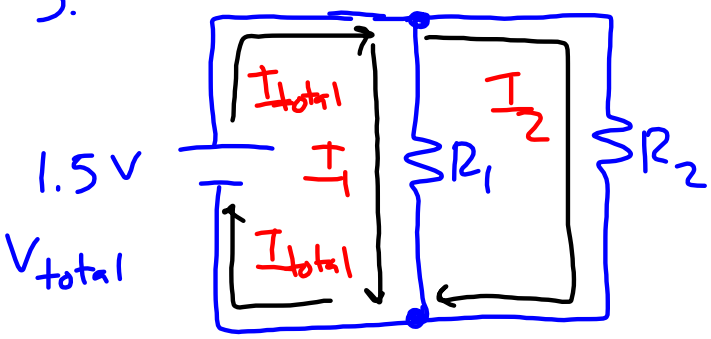
2nd Light Bulb:

$V_2 = IR_2$

$= (0.5A)(3\Omega)$

$= 1.5V$

3.



$R_1 = 2\,\Omega$

$R_2 = 3\,\Omega$

$V_1 = 1.5\,V$

$I_1 = 0.75\,A$

$R_1 = 2\,\Omega$

$$I_1 = \frac{V_1}{R_1}$$

$$= \frac{1.5\,V}{2\,\Omega}$$

$$= 0.75\,A$$

$V_2 = 1.5\,V$

$I_2 = 0.5\,A$

$R_2 = 3\,\Omega$

$$I_2 = \frac{V_2}{R_2}$$

$$= \frac{1.5\,V}{3\,\Omega}$$

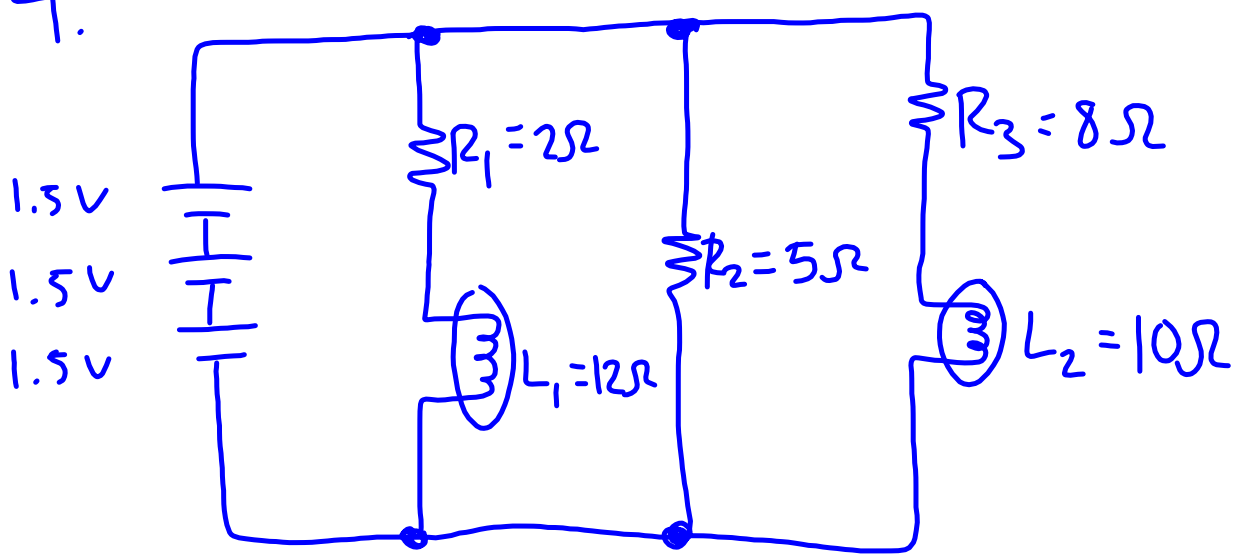
$$= 0.5\,A$$

$$I_{total} = I_1 + I_2$$

$$= 0.75\,A + 0.5\,A$$

$$= 1.25\,A$$

4.


1.5 V
1.5 V
1.5 V
$R_1 = 2\Omega$
$R_2 = 5\Omega$
$R_3 = 8\Omega$
$L_1 = 12\Omega$
$L_2 = 10\Omega$